Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

Columbia Range Subdivision HOA
159 Columbia Range Drive
Columbia Falls, MT 59912

2. **Type of action:** Application for Beneficial Water Use Permit 76LJ 30105930

3. **Water source name**: Groundwater

4. **Location affected by project:** The place of use is Columbia Range Subdivision, NENE, Section 4, Township 29N, Range 20W, Flathead, MT.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert groundwater for multiple domestic use January 1st thru December 31st and lawn and garden irrigation April 20th thru October 10th at a rate of 60 GPM up to 32.6 AF from two wells. The applicant proposes to irrigate 11.8 acres of lawn and garden. The Applicant is requesting enough water to accommodate 16 four bedroom homes that have year round residents. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

-U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program
-Montana Department of Fish Wildlife & Parks (DFWP); Dewatered Stream Information
-Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
-U.S. Natural Resource Conservation Service (NRCS); web soil survey
-Montana Historical Society

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The applicant proposes to divert groundwater; depletions to the following four surface water sources could occur: Flathead River, Flathead Lake, Mooring Slough and Mooring Creek. Upon analysis by the Department the source aquifer, Flathead River/Lake, Mooring Slough and Mooring Creek were found to have water in excess of that requested by the Applicant. Flathead River and Lake and Mooring Slough are not listed by DFWP as chronically or periodically dewatered. Between Mooring Meadow Road to the inlet of Lake Blaine Mooring Creek is listed as periodically dewatered by DFWP; this system is fed predominately by groundwater. During dry periods or low flow years reaches of Mooring Creek become intermittent pools and/or dry up. The dewatering is not caused by human use of the water, but rather is a natural phenomenon due to changes in weather and climate.

Determination: No impact.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information Center in 2016 the Flathead River, Mooring Creek and Mooring Slough were categorized as having insufficient data to asses any use. Flathead Lake fully supports drinking water, primary contact recreation, and agriculture. Aquatic life is not fully supported due to mercury, polychlorinated biphenyls, nitrogen and phosphorus. The Applicant is proposing to utilize groundwater from two wells that may deplete four surface water sources. The total volume of water potentially depleted from the 4 surface water sources is 11.4 GPM/month up to 18.3 AF and is expected to have little or no effect on the water quality of these sources.

Determination: No impact.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

The applicant proposes to divert groundwater; depletions to the following four surface water sources could occur: Flathead River, Flathead Lake, Mooring Slough and Mooring Creek. Upon analysis by the Department the source aquifer, Flathead River/Lake, Mooring Slough and Mooring Creek were found to have water in excess of that requested by the Applicant. This region of the Flathead Valley has an abundance of groundwater due to runoff from the Swan Mountains and groundwater flow from the north. Groundwater and surface water quality will not be negatively impacted.

Determination: No impact.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The proposed appropriation will utilize two wells (PWS #1, GWIC # 240843 and PWS #2, GWIC# 240844) that are 110 feet apart. Both wells are 200 feet deep. PWS #1 has a static water level of 70 feet below ground surface (bgs). Perforations exist from 180-200 ft bgs. PWS #2 has a static water level of 70.9 feet bgs. Perforations exist from 160-200 ft bgs. The wells were drilled by a licensed well driller (license # WWC-635) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. Each well will house a Goulds 80GS75 pump with a 7.5 HP 1 phase motor. Each pump is rated to produce 60 GPM at 259 feet of total dynamic head. A DLJ Epoxy Coated Cast Iron Turbine Meter, model 300T, or an equivalent model will be installed to measure diverted water. The well pumps will run on an alternate schedule, but never run simultaneously. Water from the wells will travel to a pump house which will house nine pressure tanks. From the pump house water will travel through 4 inch line. 1-inch water lines will service each residence. The water system was designed by Bryan Long, P.E. The requested flow rate of 60 GPM is the maximum attainable flow rate of one well operating. Circular DEQ 1 requirements for public water supplies using groundwater require that a redundant well be completed so that systems can meet or exceed the peak instantaneous demand with the largest well out of service (See Circular DEQ 1 (3.2)).

The proposed project shall not impact any channels, barriers, riparian areas and dams. Groundwater flow to surface waters will be modified; however modeling done by Department hydrogeologists show that no significant negative impact will occur to existing water users and surface/groundwater resources.

Determination: No impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program and DFWP websites were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project.

According to the Montana Natural Heritage Program in Township 29N, Range 20W there are four plant species of concern, Deer Indian Paintbrush (Castilleya cervina), Latah Tule Pea (Lathryus bijugatus), Beaked Spikerush (Eleocharis rostellata), and Aloina moss (Aloina brevirostris). This subdivision is almost fully built out, impact to any of the four sensitive plant species has most likely already occurred.

The Canada Lynx (Lynx Canadensis), Grizzly Bear (Ursus arctos) and Bull Trout (Salvelinus confluentus) are listed as threatened by the USFS. The Westslope Cuthroat Trout (Oncorhynchus clarkii lewisi), Wolverine (Gulo gulo), and Fisher (Martes pennanti) are listed as sensitive by the USFS. An adequate quantity of water will still exist in all four sources of water to maintain existing populations of Bull Trout; should they exist there currently. No impact.

Determination: No impact.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A, project does not involve wetlands or critical riparian habitats

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

According to soil survey data provided by the NRCS, soil within the place of use consists mostly of Creston silt loam and loamy fine sand that are quick to drain. Soils within the place of use are not susceptible to saline seep. The subdivision is almost completely built out. Very little disturbed land exists. No degradation of soil quality shall occur.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Any impacts to existing vegetation will be within the range of current disturbances due to current development within the subdivision. Noxious weeds are not expected to be established or spread.

Determination: No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. No air pollutants were identified as resulting from the applicants proposed use of groundwater.

Determination: No impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project is not located on state or federal land.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

All impacts to land, water and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is located in an area with no locally adopted environmental plans.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

There should be no significant negative impact on human health from this proposed use.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes___ No_x__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? None identified.

(*b) Local and state tax base and tax revenues?* None identified.

(c) Existing land uses? None identified.

(*d) Quantity and distribution of employment?* None identified.

(e) Distribution and density of population and housing? None identified.

(f) Demands for government services? None identified.

(g) Industrial and commercial activity? None identified.

(h) Utilities? None identified.

(i) Transportation? None identified.

(j) Safety? None identified.

(k) Other appropriate social and economic circumstances? None identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. *Describe any mitigation/stipulation measures:* None identified.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* No reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternative: None identified.

2 Comments and Responses: None.

3. *Finding:*
*Yes___ No_**x**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Melissa Brickl
Title: Hydrologist/Water Resource Specialist
Date: October 7, 2016